UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,084	11/14/2003	Hideya Kawahara	SUN04-0550-EKL	9527

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EXAMINER
LESPERANCE, JEAN E

ART UNIT	PAPER NUMBER
2629	

DATE MAILED: 09/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<table>
<tr><td rowspan="2">Office Action Summary</td><td>Application No.
10/714,084</td><td>Applicant(s)
KAWAHARA ET AL.</td></tr>
<tr><td>Examiner
Jean E. Lesperance</td><td>Art Unit
2629</td></tr>
</table>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) months from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>20 July 2006</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-33</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) <u>1-7,9-18,20-29 and 31-33</u> is/are rejected.

7) ☒ Claim(s) <u>8,19 and 30</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>14 November 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☒ All   b)☐ Some * c)☐ None of:

       1. ☒ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____.

       3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   The application filed July 20, 2006 is presented for examination and claims 1-33

are pending.

2.   The previous Office action rejection is withdrawn and the indicated allowability of

claims 9, 11, 20, 22, 31, and 33 is withdrawn in view of the new interpretation of the

prior art.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 9-13, 15, 20-24, 26, and 31-33 are rejected under 35

U.S.C. 102(b) as being unpatentable over US Patent # 5,774,125 by Suzuoki et al.

Regarding claim 1, Suzuoki et al. teach a method for displaying multiple two-

dimensional (2D) Fig.7 (A, B, and C) windows with related content within a three-

dimensional (3D) display model Fig.7 (AD1), comprising:

receiving a command to display a first window within the 3D display model

(command from CPU Fig.2 (101) to display one of the 3D object in display AD1;

displaying content of the first window on a first surface of a 3D object (Fig.7

(OB22) where the first window is displaying (**B**));

receiving a command to display a second window within the 3D display model,

wherein content of the second window is related to content of the first window

(command from CPU Fig.2 (101) to display one of the three dimensional object (OB22);

and

displaying content of the second window on a second surface of the 3D object

(Fig.7 (OB22) where the first window is displaying (**A**)) where the 3D object displays the

first window, second window, and third window (OB22) (ABC).

Regarding claim 2, Suzuoki et al. teach the second surface of the 3D object is

located on the opposite side of the 3D object from the first surface, and wherein only

one of the first surface of the 3D object and the second surface of the 3D object is

visible at any given time (as seen in figure 7, in a 2D display AT4, the three-dimensional

object ABC is displaying the first window where the second window B' is inherently

opposite to the first window and where only one window is visible at a given time and it

is the first window B.

Regarding claim 4, Suzuoki et al. teach receiving a command to display a third

window within the 3D display model (command from CPU Fig.2 (101) to display one of

the 3D object in display AD1; and displaying content of the third window on a surface of

a second 3D object, wherein the second 3D object is located in close proximity to the

3D object in the 3D display model (Fig.7 (OB22) where the first window is displaying

(**A**)) where the 3D object displays the first window, second window, and third window

(OB22) (ABC) and they are in close proximity to each other.

Regarding claim 9, 20, and 31, Suzuoki et al. teach receiving a notification that

the first window and the second window contain related content (by displaying the

content of the first window (AD1) and second window (OB22) is interpreted as receiving

notification that the first window and the second window contain related content; and

creating an association between the first window and the second window in a lookup

table (the content of the first window (AD1) and second window (OB22) are associated

with each other because they are within each other and they are stored in the drawing

area of the image memory).

Regarding claim 10, Suzuoki et al. teach the 3D object is stacked on top of the

second 3D object so that the second 3D object is obscured by the 3D object from the

viewpoint of a user (as seen in Figure 7 (OB22) where the first 3D object is placed

before a second 3D object and where the second object is almost hidden from the first

object from the view point of the user.

Regarding claims 11, 22, and 33, Suzuoki et al. teach displaying the content of

the first window (AD1) and second window (OB22) where the user can see all the

objects simultaneously.

Regarding claim 12, Suzuoki et al. teach a computer-readable storage medium

storing instructions that when executed by a computer cause the computer to perform a

method for displaying multiple two-dimensional (2D) Fig.7 (A, B, and C) windows with

related content within a three-dimensional (3D) Fig.7 (AD1) display model, the method

comprising:

receiving a command to display a first window within the 3D display model

(command from CPU Fig.2 (101) to display one of the three dimensional object (OB22);

displaying content of the first window on a first surface of a 3D object (Fig.7 (OB22)

where the first window is displaying (**B**));

receiving a command to display a second window within the 3D display model,

wherein content of the second window is related to content of the first window

(command from CPU Fig.2 (101) to display one of the three dimensional object (OB22);

and

displaying content of the second window on a second surface of the 3D object

(Fig.7 (OB22) where the first window is displaying (**A**)) where the 3D object displays the

first window, second window, and third window (OB22) (ABC).

Regarding claim 13, Suzuoki et al. teach the second surface of the 3D object is

located on the opposite side of the 3D object from the first surface, and wherein only

one of the first surface of the 3D object and the second surface of the 3D object is

visible at any given time (as seen in figure 7, in a 2D display AT4, the three-dimensional

object ABC is displaying the first window where the second window B' is inherently

opposite to the first window and where only one window is visible at a given time and it

is the first window B.

Regarding claim 15, Suzuoki et al. teach receiving a command to display a third

window within the 3D display model (command from CPU Fig.2 (101) to display one of

the 3D object in display AD1; and displaying content of the third window on a surface of a second 3D object, wherein the second 3D object is located in close proximity to the 3D object in the 3D display model (Fig.7 (OB22) where the first window is displaying (**A**)) where the 3D object displays the first window, second window, and third window (OB22) (ABC) and they are in close proximity to each other.

Regarding claim 21, it is rejected on the same rational as claim 10.

Regarding claim 23, Suzuoki et al. teach an apparatus for displaying multiple two-dimensional (2D) Fig.7 (A, B, and C) windows with related content within a three-dimensional (3D) display model Fig.7 (AD1), comprising:

a receiving mechanism configured to receive a command to display a first window within the 3D display model (command from CPU Fig.2 (101) to display one of the three dimensional object (OB22);

a display mechanism configured to display content of the first window on a first surface of a 3D object (Fig.7 (OB22) where the first window is displaying (**B**));

wherein the receiving mechanism is further configured to receive a command to display a second window within the 3D display model, wherein content of the second window is related to content of the first window (command from CPU Fig.2 (101) to display one of the three dimensional object (OB22); and

wherein the display mechanism is further configured to display content of the second window on a second surface of the 3D object (Fig.7 (OB22) where the first window is displaying (**A**)) where the 3D object displays the first window, second window, and third window (OB22) (ABC).

Regarding claim 24, Suzuoki et al. teach the second surface of the 3D object is located on the opposite side of the 3D object from the first surface, and wherein only one of the first surface of the 3D object and the second surface of the 3D object is visible at any given time (as seen in figure 7, in a 2D display AT4, the three-dimensional object ABC is displaying the first window where the second window B' is inherently opposite to the first window and where only one window is visible at a given time and it is the first window B.

Regarding claim 26, Suzuoki et al. teach the receiving mechanism is further configured to receive a command to display a third window within the 3D display model (command from CPU Fig.2 (101) to display one of the 3D object in display AD1, and wherein the display mechanism is further configured to display content of the third window on a surface of a second 3D object, wherein the second 3D object is located in close proximity to the 3D object in the 3D display model (Fig.7 (OB22) where the first window is displaying (**A**)) where the 3D object displays the first window, second window, and third window (OB22) (ABC) and they are in close proximity to each other.

Regarding claim 32, it is rejected on the same rational as claim 10.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 5, 6, 14, 16, 17, 25, 27, and 28 are rejected under 35 U.S.C. 103(a) as

being unpatentable over US Patent # 5,774,125 by Suzuoki et al. in view of US Patent #

5,764,237 ("Kaneko").

Regarding claim 3, Suzuoki fails to teach rotating the 3D object so that the

second surface is visible.

However, Kaneko teaches the CPU 3 automatically updates the fill coordinates

according to graphic operation by the user such as rotation, displacement, expansion

and contraction of the three-dimensional object. Importantly, the CPU 3 gives the initial

values of the fill coordinates and the texture coordinates to the texture mapping unit 1

(column 5, lines 55-60) and (a three-dimensional object is two-dimensionally displayed

as a group of numerous polygons (column 1, lines 24and 25)) where as seen in figures

7a, 7b, and 7c that the cubic body is rotationally displaced and where in two opposite

sides, one is hidden and the other is visible.

Thus, it would have been obvious to a person of ordinary skill in the art at the

time the invention was made to utilize the cubic object as taught by Kaneko et al. in the

texture mapping disclosed by Suzuoki because this would provide a texture mapping

apparatus which can allocate texture data in a diverse and flexible manner while saving

the texture memory capacity (column 2, lines 27-29).

Regarding claim 5, Suzuoki et al. teach receiving a modal dialog related to the

content of the first window, wherein the modal dialog must be responded to before any

other action may be taken on an application (command from CPU Fig.2 (101) to display

one of the 3D object in display AD1 where the DMA controller 8 of Figure 1 representing

a computer which uses an operating system to boot corresponding to the modal dialog. The prior art teaches all the claimed limitations with the exception of providing rotating the 3D object so that the second surface is visible and the first surface is hidden; and displaying the modal dialog on the second surface.

However, Kaneko teaches the CPU 3 automatically updates the fill coordinates according to graphic operation by the user such as rotation, displacement, expansion and contraction of the three-dimensional object. Importantly, the CPU 3 gives the initial values of the fill coordinates and the texture coordinates to the texture mapping unit 1 (column 5, lines 55-60) and (a three-dimensional object is two-dimensionally displayed as a group of numerous polygons (column 1, lines 24and 25)) where as seen in figures 7a, 7b, and 7c that the cubic body is rotationally displaced and where in two opposite sides, one is hidden and the other is visible.

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the cubic object as taught by Kaneko et al. in the texture mapping disclosed by Suzuoki because this would provide a texture mapping apparatus which can allocate texture data in a diverse and flexible manner while saving the texture memory capacity (column 2, lines 27-29).

Regarding claim 14, it is rejected on the same rational as claim 3.

Regarding claim 16, it is rejected on the same rational as claim 5.

Regarding claim 25, it is rejected on the same rational as claim 3.

Regarding claim 27, it is rejected on the same rational as claim 5.

Regarding claim 6, it is rejected on the same rational as claim 5.

Regarding claim 17, it is rejected on the same rational as claim 5.

Regarding claim 28, it is rejected on the same rational as claim 5.

5.   Claims 7, 18, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent # 5,774,125 by Suzuoki et al. in view of US Patent # 7,039,801 ("Narin").

Regarding claim 7, Suzuoki et al. fail to teach the first window and the second window are associated with different applications.

However, Narin teaches rendering an output of said first software object in a <u>first window</u> having a first region on said display; and rendering an output of said second <u>software</u> object in a <u>second window different from said first window, said second window</u> having a second region on said display (column 11, lines 43-47).

Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to utilize the software as taught Narin in the texture mapping disclosed by Suzuoki et al. because this would a technique for integrating untrusted or "open" features into a closed process (column 1, lines 64 and 65).

Regarding claim 18, it is rejected on the same rational as claim 7.

Regarding claim 29, it is rejected on the same rational as claim 7.

Allowable Subject Matter

6.   Claims 8, 19, and 30 are objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: the claimed

invention is directed to a method for displaying multiple two-dimensional windows with

related content within a three-dimensional display model.

Dependent claims 8, 19, and 30 identify a uniquely distinct feature "looking up an

identifier for the second window in a lookup table that contains entries specifying

relationships between windows; determining if the second window is related to the first

window; if so, displaying content of the second window on the second surface of the 3D

object; and if not, displaying content of the second window on a surface of a distant 3D

object, which is not located in close proximity to the 3D object in the 3D display model".

Conclusion

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jean Lesperance whose telephone number is (571)

272-7692. The examiner can normally be reached on from Monday to Friday between

10:OOAM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richard Hjerpe, can be reached on (571) 272-7691.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park 11, 2121 Crystal drive,

Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the technology Center 2600 Customer Service Office

whose telephone number is (703) 306-0377.

Jean Lesperance

Date 9/19/2006

Art Unit 2629

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600